

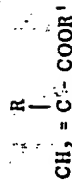
91-264063/36 A96 D22 F07 (A14) LIOY 06.07.90  
 UNION CORP \*JO 3174-417-A  
 06.09.89-JP-231209 (+JP-178826) (29.07.91) C08f-08/44  
 C08f-220/06

Water-soluble and salt-sensitive polymer - used in contact with body fluids and comprises (meth)acrylic acid and mixt. of vinyl monomer

C91-114706

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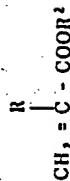
A water-soluble and salt-sensitive polymer comprises (A) 10-80 wt. % (meth)acrylic acid, (B) 90-10 wt. % vinyl monomer of formula:



R = H or methyl; and

R<sup>1</sup> = an aryl or cycloalkyl gp.

and at least 2 - 70 mol. % of which is present in the form of its salt or (C) comprising (C<sub>1</sub>) 2 - 70 wt. % vinyl monomer and (C<sub>2</sub>) 2 - 40 wt. % vinylic monomer of formula:



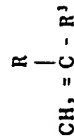
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## Documentation

Abstracts Profile 1991

A(4-C1, 4-F4, 4-F6E5, 9-A, 12-V3A) D(9-C2, 9-C3, 9-C4B) A 0598  
 F(4-C1, 4-E4)

R<sup>2</sup> = an alkyl, aryl or cycloalkyl gp.  
 and (C<sub>2</sub>) 2 - 40 wt. % of vinylic monomer of formula:



R<sup>3</sup> = an aryl.

### ADVANTAGE/USE

The polymer is soluble in fresh water but insoluble in water contg. at least 5 % neutral inorganic salt of a monovalent ion. It is formed into a film or a salt binder free from tackiness. It is used as parts in contact with body fluids (such as urine or blood) to prevent the spreading of body fluids. The spent polymer is discarded into a flush toilet. It is used as diapers, unwoven bandage or sanitary goods.

### EMBODIMENT

(B) or (C<sub>1</sub>) is pref. cyclohexyl (meth)acrylate or cyclopentyl (meth)acrylate.

\*J03174417-A\*

(C<sub>2</sub>) is pref. butyl-, 2-ethylhexyl-, phenyl-, benzyl-, phenoxyethyl-, cyclohexyl- or cyclohexyl (meth)acrylate. (C<sub>2</sub>) is pref. styrene, alpha-methylstyrene or o-methylstyrene. (A) or (C<sub>1</sub>) is neutralised to an extent = 2 - 70 mol. % pref. by ethanolamine or a mixt. of ethanolamine and KOH or NaOH.

The polymer is prepd. pref. by soln. polymn. in a lower alcohol (e.g., methanol, ethanol or 2-propanol) or in an aq. alcohol contg. 10 - 70 % water or in an aq. ketone (e.g., acetone or MEK) in the presence of a 0.02 - 5 % comprising 10 - 70 % water and 90 - 30 % ketone (e.g., acetone or MEK) in the presence of a 0.02 - 5 % polymerisation initiator (e.g., 2,2'-azobisisobutyronitrile, 2,2'-azobis(2-amidinopropane), 2 HCl, K peroxy sulphate, ammonium peroxy sulphate or H<sub>2</sub>O<sub>2</sub>) at 50 - 90°C. The polymer has an average mol.wt. = 10000 - 1500000. (8ppW59CGDwgNo0/0).

jp03174417/pn

L13 ANSWER 1 OF 1 WPINDEX COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 1991-264063 [36] WPINDEX  
DOC. NO. CPI: C1991-114706  
TITLE: Water-soluble and salt-sensitive polymer - used in  
contact with body fluids and comprises (meth)acrylic acid  
and mixt. of vinyl monomer.  
DERWENT CLASS: A14 A96 D22 F07  
INVENTOR(S): IIDA, Y; KOMATSU, M  
PATENT ASSIGNEE(S): (LIOY) LION CORP  
COUNTRY COUNT: 2  
PATENT INFORMATION:

	PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
→	JP 03174417	A	19910729	(199136)*				<--
	US 5317063	A	19940531	(199421)#		7	C08F220-06	
	JP 3162696	B2	20010508	(200128)		9	C08F220-06	

APPLICATION DETAILS:

	PATENT NO	KIND	APPLICATION	DATE
→	JP 03174417	A	JP 1990-178826	19900706
	US 5317063	A	US 1991-656755	19910219
	JP 3162696	B2	JP 1990-178826	19900706

FILING DETAILS:

PATENT NO	KIND	PATENT NO
JP 3162696	B2 Previous Publ.	JP 03174417

PRIORITY APPLN. INFO: JP 1989-231209 19890906  
JP 1990-178826 19900706  
INT. PATENT CLASSIF.: C08F008-44; C08F220-06  
MAIN: C08F220-06  
SECONDARY: C08F008-44; C08F220-12; C08F220-18

BASIC ABSTRACT:

JP 03174417 A UPAB: 19930928  
A water-soluble and salt-sensitive polymer comprises (A) 10-90 wt.%  
(meth)acrylic acid, (B) 90-10 wt.% vinyl monomer of formula.  
CH<sub>2</sub>=CR-COOR<sub>1</sub> (I).  
Where R is H or methyl and R<sub>1</sub> is an aryl or cycloalkyl gp.  
and at least 2-70 mol.% of which is present in the form of its salt  
or (C) (C1) 2-70 wt.% vinyl monomer and (C2) a 2-40 wt.% vinylic monomer  
of formula.  
CH<sub>2</sub>=CR-COOR<sub>2</sub> (II).  
Where R<sub>2</sub> is e.g., an alkyl, aryl or cycloalkyl gp. and (C3) 2-40 wt.%  
of vinyl monomer of formula.  
CH<sub>2</sub>=CR-R<sub>3</sub> (III).  
Where R<sub>3</sub> is an aryl.  
USE/ADVANTAGE - The polymer is soluble in fresh water but insol. in  
water contg. at least 5% neutral inorganic salt of a monovalent ion. It is  
formed into film or a salt binder free from tackiness. It is used as parts  
in contact with body fluids (such as urine, blood, etc.) to prevent

spreading of body fluids. The spent polymer is discarded into a flush toilet. It is used in diapers, nonwoven bandage, sanitary goods, etc..  
0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB

MANUAL CODES: CPI: A04-C01; A04-F04; A04-F06E5; A09-A; A12-V03A;  
D09-C02; D09-C03; D09-C04B; F04-C01; F04-E04